

What 15 Years Of ITS Deployment Tracking Teaches Us

ITS Committee Meeting

January 25, 2012

James Pol, Intelligent Transportation Systems
Joint Program Office, RITA, U.S. DOT

Tracking Our Success

- Tracking the deployment of ITS technology for more than 15 years
- Administered approximately every 20 months
- Initially covered 78 metro areas then expanded to include 108

2010 Deployment Tracking Results

RITA Intelligent Transportation Systems
Joint Program Office

Deployment of ITS: A Summary of the 2010 National Survey Results

www.its.dot.gov/index.htm
Final Report — August 2011
FHWA-JPO-11-132

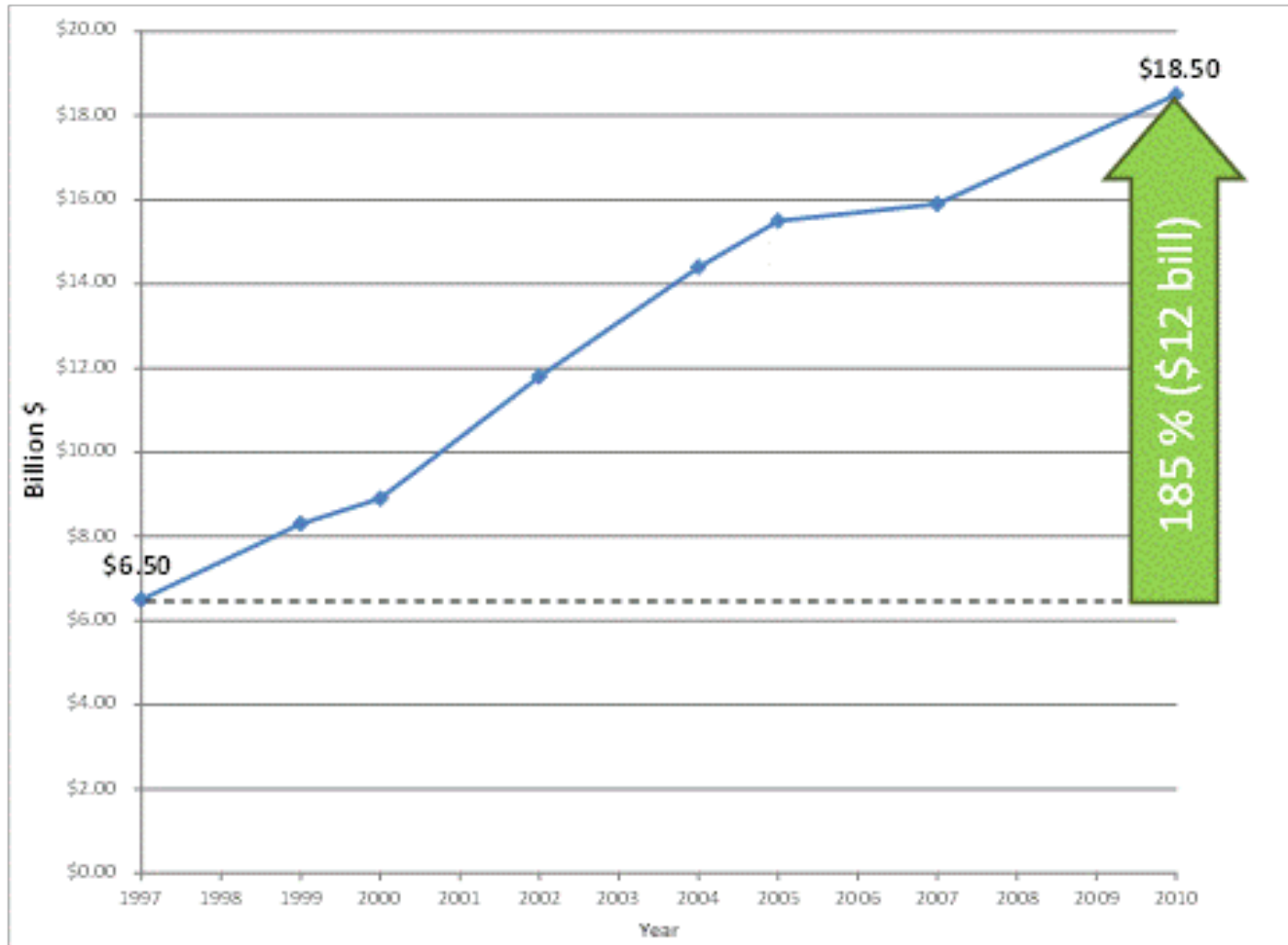


U.S. Department of Transportation
Research and Innovative Technology
Administration

- www.itsdeployment.its.dot.gov
- Nearly 1,600 Public Agencies Surveyed
 - Freeway Management
 - Arterial Management
 - Transit Management
 - TMCs
 - Electronic Toll Collection
 - Public Safety – Fire Rescue
 - Public Safety – Police

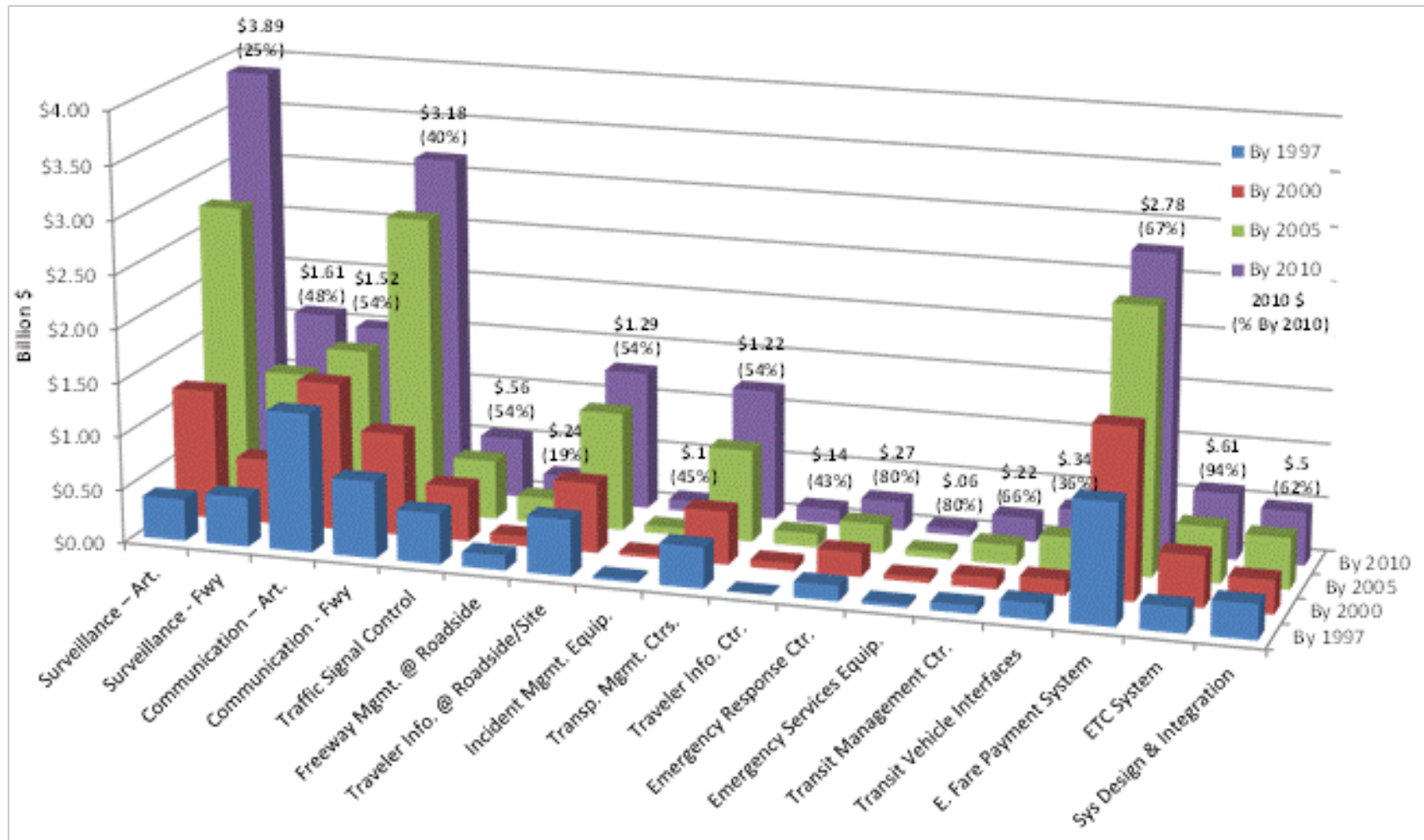
Tracking Our Success

- Investment in ITS has nearly **tripled**



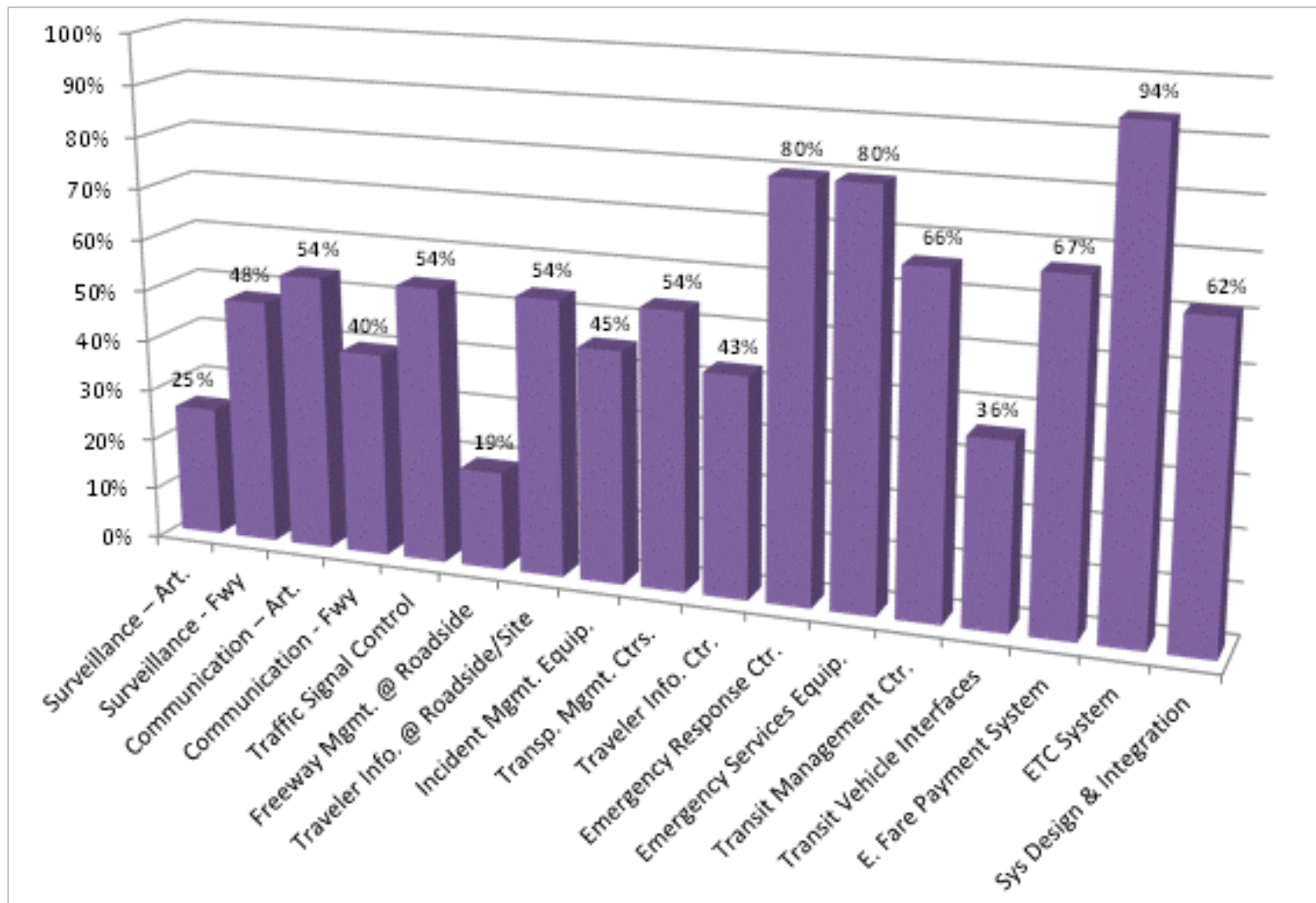
Tracking Our Success

- Most areas within ITS grew over the years.



Tracking Our Success

- Some technologies have achieved near **universal deployment**.



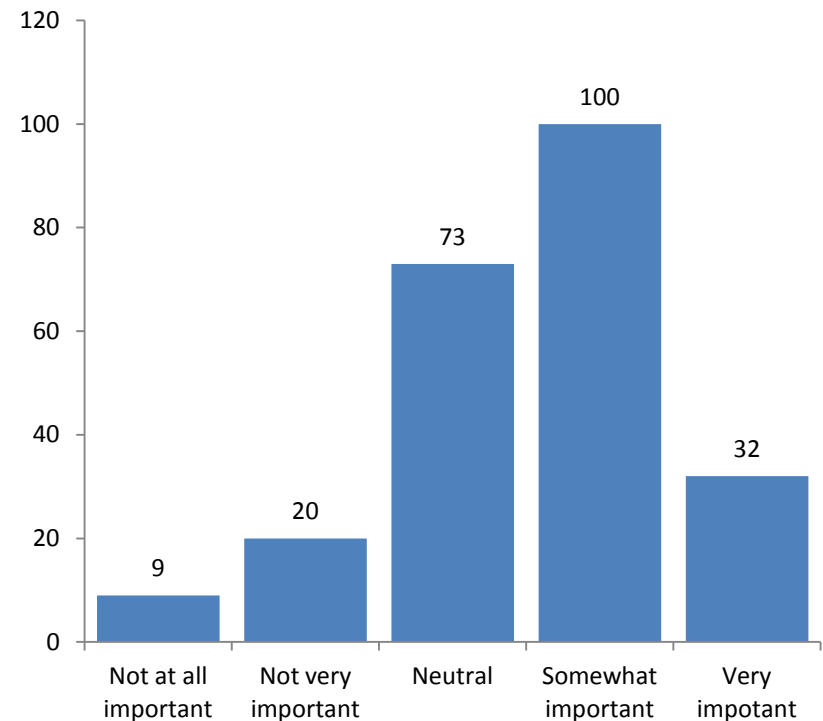
Analyzing the Data

- Quantitative analysis of deployment data
- Examined historical diffusion patterns
- Investigated influences on adoption and deployment focusing on policy levers

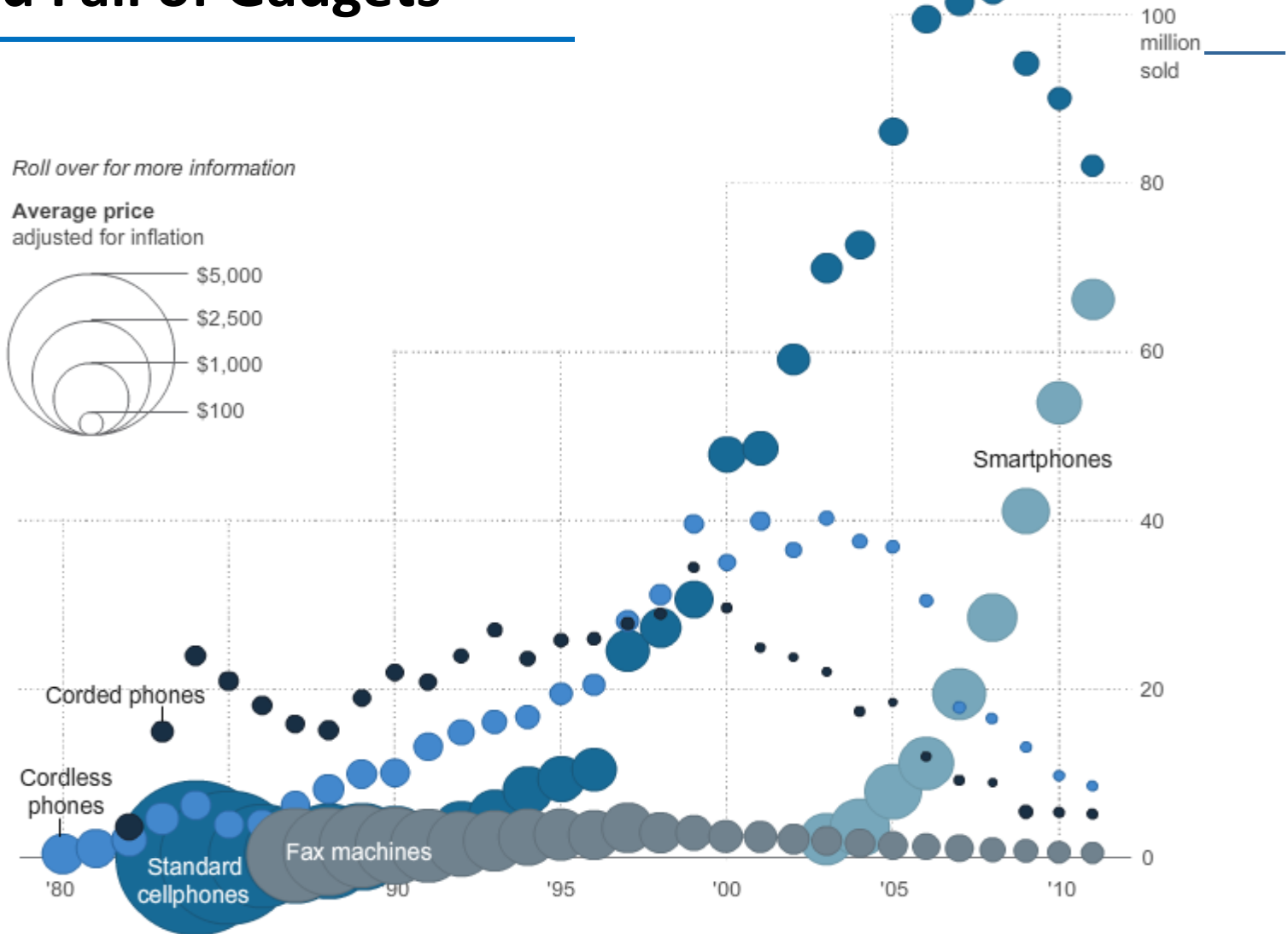
Historical Trends

- Current generation markets appear to be mature
- Found that markets are driven by imitators
 - Initial adoption rate is slow but increases over time
- 2010 results (at right) support this finding

**Importance of Technology
Already Being Used by Other
Agencies (n =234)**



Rise and Fall of Gadgets



NOTE: 2010 data are estimates and 2011 data are projections.

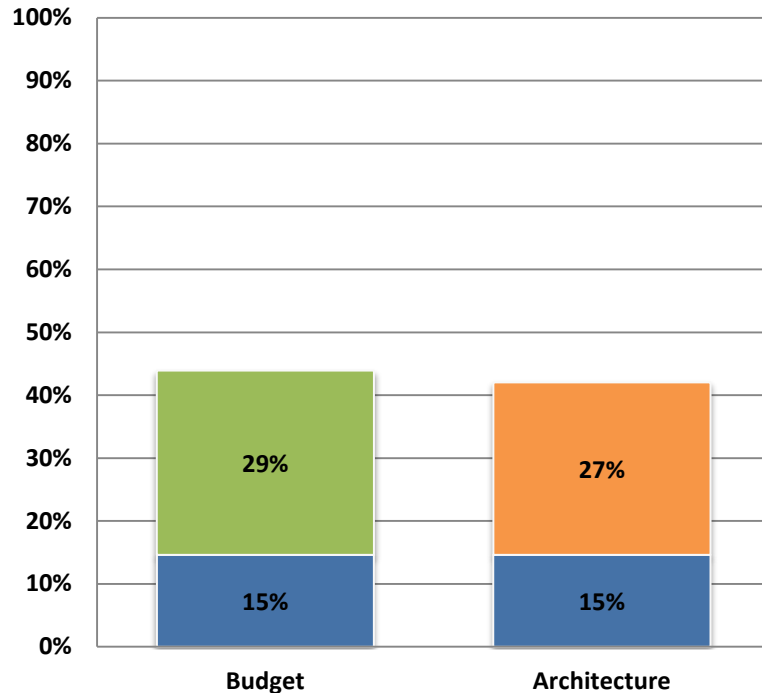
GRAPHIC: Alicia Parlapiano / The Washington Post - January 10, 2011

How Policy Influences Deployment

- Planning requirements (e.g. Regional Architectures) can increase adoption
- Increased budget can increase adoption and deployment levels
- Targeted funds for projects (i.e. earmarks) are ineffective in spurring adoption or deployment

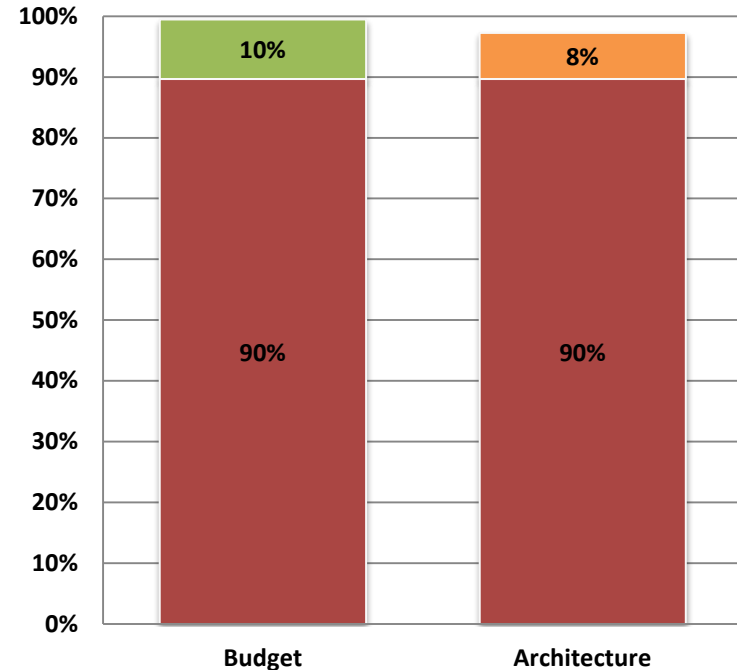
Insight: Regional Architecture stimulates deployment

Emergency Vehicle Priority— Fire and Rescue



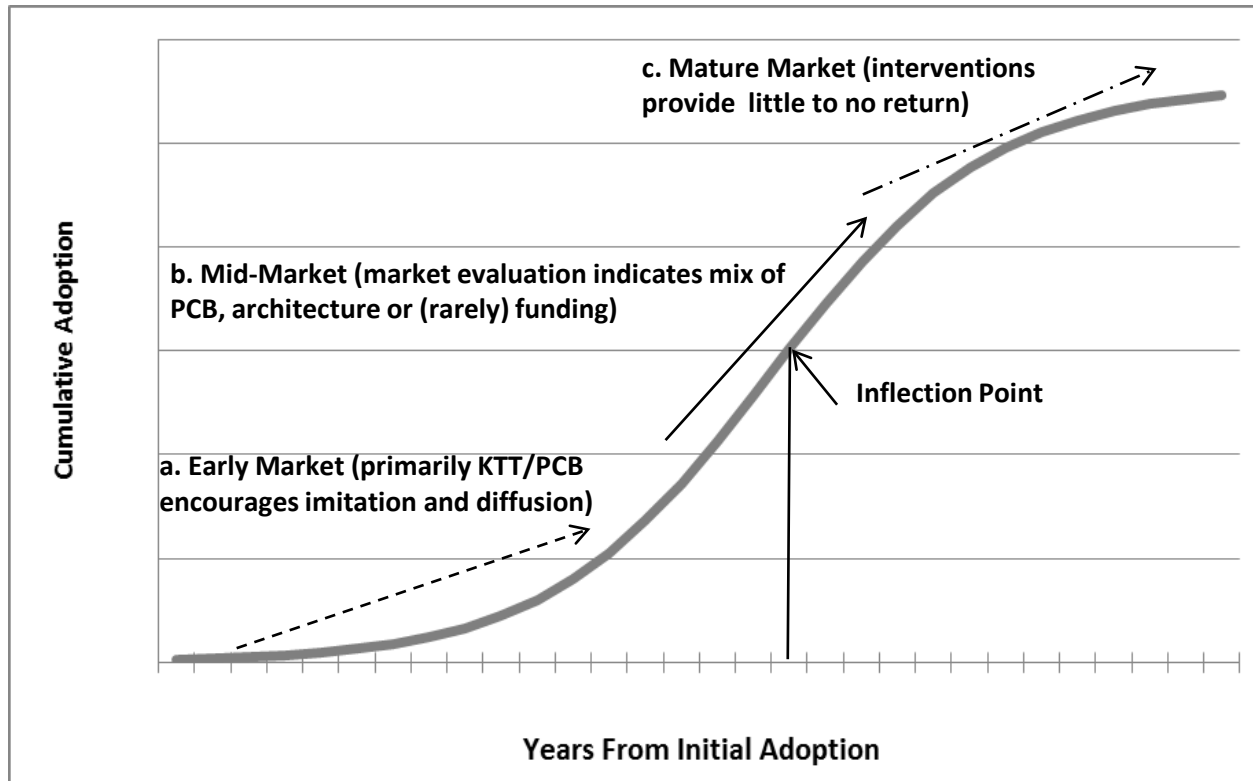
- Baseline predicted adoption probability for median agency
- Increase in adoption probability after a major increase in annual budget or architecture implementation

Vehicle Data Collection



- Baseline predicted adoption probability for median agency
- Increase in adoption probability after a major increase in annual budget or architecture implementation

Insight: Markets are sensitive to training and policy



- Deployment tracking survey allows highlights effectiveness of various interventions
- Can be used to understand how to encourage adoption over lifecycle of technology

Next Steps

- Starting to develop 2013 survey
 - Change survey to reflect changing market
 - Important to keep some continuity to track changes over time
- Connected vehicle technologies
 - Important to catch early in deployment lifecycle
 - Apply lessons learned from other technologies to connected vehicle

For More Information

RITA U.S. Department of Transportation
Research and Innovative Technology Administration

Intelligent Transportation Systems
Joint Program Office

About Research Tech Transfer Library Press Room Communities Contact Us

RITA Updated May 10, 2011 11:44 AM

Print

Imagine that . . .
... transit and truck drivers receive regular updates, allowing them to stay on schedule -- and stay in business

Message to Stakeholders from RITA Administrator Peter Appel
RITA is working with our colleagues and stakeholders to implement the Intelligent Transportation Systems (ITS) Strategic Research Plan, 2010 - 2014. [Read more...](#)

Spotlight

- Public Transit Intelligent Transportation Systems (ITS) Implementations – Lessons Learned 5/10/11
- Connected Vehicle Test Beds featured in Thinking Highways Magazine 4/25/11
- AERIS Program featured on White House Blog 4/18/11

[More News>>](#)

Our Current Research

Applications Mode-Specific Cross-Cutting

- Vehicle-to-Vehicle Safety
- Vehicle-to-Infrastructure Safety
- Real-Time Data Capture
- Dynamic Mobility Applications
- Environment
- Road Weather

[More >>](#)

Shelley J. Row, P.E., PTOE
Director
ITS Joint Program Office

[Biography](#)

Procurement Opportunities

As we implement the ITS Research Strategic Plan, open procurements may become available through a variety of solicitations. [More >>](#)

Public Meetings [View >>](#)

ITS Video Challenge
Grab your camera and share the story of your community's ITS deployment.
[>> Official Rules](#)

Stay Connected

Facebook Twitter Email RSS

www.its.dot.gov

James Pol, PE, PMP

Team Leader

RITA, ITS Joint
Program Office (JPO)

James.Pol@dot.gov



James Pol